United States Patent [19]

Tanaka et al.

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[54] **PROCESS FOR PRODUCTION OF ARTIFICIAL LEATHERS HAVING AIR PERMEABILITY**

[75] Inventors: **Yoshinobu Tanaka; Hidehiko Maki,** both of Kyoto; **Tamio Ishiai,** Wakayama; **Tasaku Nishii,** Wakayama; **Singi Oota,** Wakayama, all of Japan

[73] Assignee: **Nippon Cloth Industry Co., Ltd.,** Kyoto, Japan

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[58] **Field of Search** ..... 264/54, 48, 46.3, 257; 260/2.5 BD, 2.5 AY; 156/79, 246, 344

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Primary Examiner—Philip Anderson
Attorney, Agent, or Firm—Woodhams, Blanchard and Flynn

[57] **ABSTRACT**

A process for the production of artificial leathers having excellent air permeability and resembling a natural leather is provided, which comprises incorporating a catalyst, a foam stabilizer and, optionally, a pigment and other additive into an isocyanate-terminated polyurethane prepolymer formed by compounding a polyester diol derived from an aliphatic dicarboxylic acid with an organic polyisocyanate so that the [NCO]/-[OH] ratio is within a range of from 2.0 to 4.0, to thereby form a substantially solvent-free paint having a viscosity adjusted to 70 to 1000 poises, coating the paint on a release paper in an amount of 50 to 400 g/m², applying the release paper to a substrate, allowing foaming and polymerization reactions to proceed in an atmosphere of a dry-bulb temperature of 40° to 95°C. and a relative humidity of at least 60%, passing the assembly, during the advance of said reactions, between two upper and lower rolls, the clearance of which is so adjusted that the foaming ratio is 2 to 4 in a polyurethane foam layer formed from the polyurethane prepolymer paint coating, further advancing the reactions, and peeling the release paper from the foam layer.

10 Claims, 1 Drawing Figure